Implications of the Appreciation of the Canadian Dollar for the Agri-food Sector

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Executive Summary

One of the extraordinary changes in the financial world in 2003 has been the sharp decline in the value of the US dollar vis-à-vis the world's major currencies, including the Canadian dollar, the Euro, the Yen, and the Pound. Over a year's period, the loonie appreciated by over 20%, gaining back almost all the value it lost over the previous ten years.

The appreciation of the loonie is likely to have a significant impact on Canada's/Alberta's agri-food industry and on many other industries of the Canadian economy, because export revenue is a major source of market cash receipts. Alberta's agri-food industry generates slightly over a third of its total market cash receipts from exports. The corresponding figure for Canada as a whole is less, yet substantial, at slightly over 25%.

Alberta exports close to 40% of its primary agricultural exports and over 73% of its value-added processed exports to the U.S.. However, the effect of the loonie's appreciation is not restricted to the U.S. market. It will affect exports to third markets as well, where Canadian/Albertan exports compete with U.S. exports and wherever exports are priced in U.S. dollars. A stronger loonie would either reduce the profit margins of exports or would make them more expensive for importers, rendering them less competitive. Overall, the hardest hit agri-food sector will be the livestock sector both at the primary and the value-added processing level, followed by wheat, pulses and oilseeds.

The Net Effect

In the short-term, the appreciation of the loonie has few positive effects that have to be taken into account in measuring the net impact. **First**, imported agricultural inputs become cheaper. In the primary sector, for example, the cost of imported inputs (machinery, fertilizers, pesticides, etc) is roughly equivalent to 43% of the value of primary exports for Alberta and close to 50% for Canada as a whole. This means that, for Alberta, 43% of the loss in export revenue due to the appreciation of the loonie is offset by cheaper imported inputs. However, this positive impact is modest for the livestock sector (less than 20%) where imported inputs are relatively less important. Further, it is not automatic that input-supplying companies will pass the exchange rate gain on to producers.

Second, the appreciation of the loonie has contributed toward the Bank of Canada's decision to reduce its target overnight rate three times since the second half of 2003. This in turn has led to a reduction in most commercial banks' rates, which would mean reduced cost of debt servicing for agriculture and food businesses. This effect is modest relative to the negative effect on the export side, but substantial relative to the debt servicing cost itself. Outstanding farm debt in Alberta in 2002 was estimated at $9.7 billion.

Policy Implications

Even after accounting for the positive effects, the net impact of the loonie's surge is likely to be significantly negative. Moreover, even in the event of a reverse movement, the loonie will

likely not slide back to its pre-2003 level, at least, over the medium term. The following are some of the long run implications for Alberta's agri-food industry:

- **First**, in the absence of a cheap loonie, agri-food producers will be forced to improve productivity and efficiency in order to be competitive both internationally and domestically through adoption of new technology, better management, increasing scale of operation and further processing particularly in value-added livestock products. It follows government policies (e.g., income safety-net programs and marketing regimes) that hinder market signals, such as the impact of exchange rate changes, from transmitting to producers will delay this needed economic adjustment.

- **Second**, in line with the department's growth strategy, the exchange rate challenge provides one more impetus for expanding the value-added processing sector, which has relatively larger scope and flexibility to adjust prices to better cope with market shocks. More possibilities for product differentiation and branding and relatively lower price elasticities for processed products provide greater capacity for pricing strategies and less susceptibility to market shocks. Innovation strategy should include further processing of products with small value-added component, such as boxed beef.

- **Third**, market diversification, in particular, for the value-added processed products is evermore imperative. In spite of the fast growth in exports of value-added processed products in the past decade, only 27% of Alberta's value-added processed exports are shipped to non-U.S. destinations. Future marketing initiatives will have to be geared at reducing reliance on one single market and toward diversifying into offshore niche markets, fast growing economies whose consumption and Western-type life-style is on the rise and markets which have experienced similar currency appreciation. This strategy reinforces Alberta's thrust for international trade liberalization, as offshore markets, especially for value added products in high growth markets, remain the most restricted.

- **Fourth**, an appreciating loonie could discourage investment in the export-oriented industries due to its negative effects on export receipts. This is an important consideration for Alberta as the province is keen on attracting investment from both domestic and international business. Strategies devised to attract investment into Alberta would thus need to take this effect into consideration in order to be effective.

- **Finally**, the rise in the value of the Canadian dollar will have policy implication for farm income support programs. This is particularly true under the Canadian Agricultural Income Stabilization (CAIS) program that substitutes NISA since farmers can be covered for any level of loss in their production margin. The loss in production margin from the appreciation of the loonie could be significant, in particular, for certain sub-sectors or products. At the same time, the sharp surge in the loonie signifies that agri-food producers need to protect themselves from future exchange rate and other financial risks through futures markets and other private insurance mechanisms.

Introduction

In the waning year of 2003, one of the extraordinary changes in the financial world has been the sharp surge in the value of the world's major currencies, including the Canadian dollar, the Euro, the Yen, and the Pound vis-à-vis the U.S. dollar. Swings in the value of currencies is nothing new since the termination of the Breton Wood's fixed exchange rate system in the early 1970s. What makes the recent events special is the rate at which these currencies appreciated against the U.S. dollar, or the flip side of it, how fast the U.S. dollar depreciated.

The recent ascent of the Canadian dollar is a reversal of a more than a decade trend. From the fourth quarter of 1991 to the fourth quarter of 2002 the Canadian dollar had depreciated more or less steadily against the U.S. dollar by 28%. By contrast, over the past 15 months since the loonie began its ascent, it has appreciated by close to 22%, gaining almost all the value it lost over the previous decade (see figure 1). Whether this trend will continue or at what level the exchange rate of the loonie will eventually settle is early to judge. However, there is a widespread consensus among analysts that the loonie was not supposed to go below the 70-cent mark in the first place.

The sharp surge in the value of the Canadian dollar has significant implications for the Canadian economy overall, but more so for the export-oriented sectors. The effect will be magnified in Canada, perhaps more than for any of the other countries whose currencies too have appreciated, because the United States is by far the largest trading partner for Canada. On average 87 percent of Canada's exports are shipped to the United States, while 65% of its imports originate from the U.S..

Both the Government and Bank of Canada have long openly admitted that the appreciation of the loonie has significant negative impacts on the Canadian economy. The economy's job creation in 2003 has been substantially slower than in 2002 (with 98000 jobs created in the first three quarters of 2003 compared to over half a million in 2002) while the unemployment rate at 8% is slightly higher. Consequently, the economy's growth projection for 2003 has been revised downward from 3.2% to 1.9%. The effect of a stronger loonie is mentioned as one of the reasons. [1]

The government and the Bank have set their hopes for a better economic performance in 2004 on a strong recovery in the U.S. economy that would boost export demand and offset the negative effect of the surge in the loonie. The Finance minister report to the House of Commons Standing Committee on Finance on Nov. 3, 2003 has emphasized this fact. In anticipation of such recovery, the Bank of Canada had left its overnight lending rate unchanged in its October and December 2003 announcements before lowering it by a quarter of a percent in its most recent announcement.

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[1] Over the first several months of 2003, public discussion and effort has focused mainly on other shocks to the economy including the SARS outbreak in Toronto, the BSE case in Alberta and the more transient shocks including the August blackout in Toronto and the fire and flood damages in British Columbia. But now that these other shocks have run or are running out their courses, the impact of the appreciation of the loonie is being given the forefront attention.

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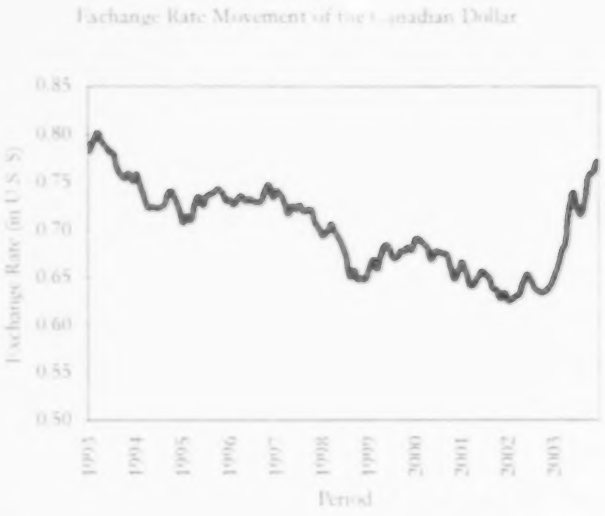
The objective of this analysis is to provide a broad assessment of the implications of the recent surge in the exchange rate of the Canadian dollar for Alberta's/Canada's agri-food industry. The analysis attempts to provide a rough and general impact assessment and policy implications for the agri-food industry. A thorough examination of the effect of exchange rate changes would require a complex quantitative analysis. Such analysis is beyond the scope of this paper.



A Strong Loonie is Bad News for Exports

How exactly does the appreciation of the loonie affect the Canadian economy? First and foremost, it affects those sectors or industries that are reliant on the export market by either making their products more expensive and thus less competitive or by reducing their profit margin. The first and clear impact is on those exports destined to the U.S.. Given that over 87% of Canada's exports go to the U.S. this effect is huge. Exports that are priced in U.S. dollars, such as commodities, face reduced profit margin as less Canadian money is obtained for same U.S. dollar proceeds. For exports priced in Canadian money, the appreciation of the loonie makes these products more expensive for importers. Consequently, Canadian exports become less attractive or less competitive. Whether exporters of such products will absorb the effect of the appreciation of the loonie by reducing their prices and maintain their market share depends on the scope and flexibility of the value structure of their products and other market considerations or strategies. This option is not likely to be viable in the primary agriculture sector where such scope is limited, at least, in the short run.

The appreciation of the Canadian dollar also affects Canadian exports to offshore markets. Where these exports compete with U.S. products, the latter will have a competitive advantage. Whether Canada will face a competitive disadvantage vis-à-vis other exporters depends, among other things, on the magnitude of the appreciation of their currencies. In figure 2, we observe that, among the selected countries, the highest appreciation is registered by the Australian dollar followed by the Brazilian real and the EURO. It follows in these

Exchange Rate Movements of Selected Currencies Against the U.S. $ (October 2002-January 2004)

countries and in third markets, including in the U.S. market, Canadian exporters will have a slight competitive advantage over their Australian, Brazilian and European competitors. The Euro has been appreciating more or less in tandem with the Canadian dollar, but has risen more sharply in recent months. By contrast, the Japanese yen and the British pound have appreciated less dramatically while the Mexican peso has overall depreciated. The Chinese Yuan, which is pegged to the US dollar, has, by default, depreciated against other currencies. Consequently, China is increasingly facing international pressure to revalue the Yuan. However, even if China decides to let its currency appreciate, it may not suffer a great deal of competitive disadvantage in international markets. China and other developing countries such as Brazil can better absorb the effect of a currency appreciation since a lower production cost would allow them to counteract the effect by reducing their export prices. Finally, many developing countries whose currencies are not internationally convertible generally make their import purchases in U.S. dollars. Canadian exports to these countries will thus bring in less proceeds in Canadian money, regardless of which countries Canada competes with in these markets.

Effects on the Agri-food Sector

Negative Effects

One of the sectors that will be negatively affected by the appreciation of the Canadian dollar is the agri-food sector. This is because Canada's/Alberta's agri-food sector is significantly

dependent on export markets, primarily the U.S. market. For example, during the five-year period from 1998 to 2002, Canadian agri-food exports to the U.S. on average constituted 62 percent of Canada's total agri-food exports[2]. The proportion is even higher for certain products: cattle and hogs (100%), oilseed cake and meal (87%), beef (83.5%) and refined Canola/mustard oil (72%).

The effect on Alberta's agri-food exports will be significant too because Alberta makes up over a fifth of the nation's total agri-food exports and about a fifth of Canada's agri-food exports to the U.S. For Alberta itself, the U.S. takes up 55% of the province's agri-food exports, which is slightly less than the national proportion.

Primary Versus Value-added Processing

Over 73% of value-added processed exports and close to 40% of primary agriculture exports from Alberta are shipped to the U.S. However, the effect of the appreciation of the loonie is not restricted to the U.S. market, but extends to third markets, where Alberta exports compete with U.S. exports and exports of other countries whose currencies have depreciated or appreciated less. But, it is not only the proportion of exports that are negatively affected by the loonie's surge that matters, but ultimately how significant that effect will be on overall market cash receipts. In primary agriculture, export revenues, on average, accounted for slightly over 40% of the total market cash receipts during the 1998-2002 period. During the same period, export revenues, on average, contributed about 27% of total market cash receipts in the value-added processing sector. For Canada as a whole, while export revenue share in the primary agriculture is more or less the same as in Alberta, export revenue share is less in the value-added processing sector (at 18.5%).

For the agri-food industry taken as a whole, export proceeds generate slightly over a third of the industry's total market cash receipts in Alberta, and slightly over a quarter in Canada as a whole. It follows any external shock, including the rise in the value of the Canadian dollar, affects Alberta's agri-food industry more that it would the nation's agri-food industry as a whole. This is particularly true in view of the fact that the appreciation of the Canadian dollar is likely to affect the livestock sector the most and that Alberta constitutes over a quarter of the livestock sector in Canada.

Effects on Specific Products

Among the primary products the hardest hit will be live cattle, live hogs, wheat, pulses and oilseeds. However, the share of export revenue in total market cash receipts is relatively modest for live cattle (at 18%) and for live hogs (at 20%). Among processed value-added products, by far the most affected will be beef, which makes up close to two-thirds of the exports of processed products to the U.S. and for which export proceeds contribute over 45% of the total market cash receipts.

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[2] This is an exceptionally high proportion in view of the fact that no other country, except Japan and Mexico, take up more than 2 percent of Canadian agri-food exports. Proportions of Canadian agri-food exports to Japan and Mexico were 9.12 and 2.95%, respectively, in 2002.

Net Effect

also international demand for processed products is generally upward trending. Further, relatively lower price elasticities for processed products provide greater capacity for pricing strategies through differentiation and branding.

Prediction

As argued above, domestic economic fundamentals have had limited role in the recent appreciation of the Canadian dollar and other major world currencies. The more or less uniform change in the value of these currencies was essentially the reflection of the depreciation of the U.S. dollar for US domestic reasons. Future exchange rates will as well be mainly determined by developments in the U.S..

Many economists and financial analysts agree that the U.S. dollar was "artificially" overvalued before it started its downward slide. The U.S. was able to run a huge current account deficit alongside a strong dollar because residents of surplus countries were willing to hold an increasing share of wealth in U.S. assets that were both lucrative (re. technology boom) and regarded as safe. When naturally yields from U.S. assets declined ("things that cannot go on forever don't"), investors started to buy assets denominated in other currencies, which offered more attractive yields. This is one precipitating factor for the sharp fall in the value of the U.S. dollar. The downward pressure on the U.S. dollar will persist, other things remaining constant, as long as higher interest rates on European, Australian and Canadian debt attract capital out of the U.S. to these countries.

At the same time, the Bush administration is apparently in favor a softer dollar in the hope that it would boost oversees shipments that could ignite the manufacturing sector to pick up employment and investment. A weak dollar policy will continue to be a preferred policy at least until after the 2004 presidential election.

Had the US tax cut stimulated the U.S. economy enough, the domestic excess demand pressures created would lead to short-term real and nominal appreciation of the U.S. dollar and thus to the depreciation of the Canadian dollar. However, the tax plan has not yet produced significant results. The fine theoretical arguments for and against tax cut aside, investors' confidence is still relatively low in the U.S. even though recent statistics suggest a record growth in the manufacturing sector and improved job creation situations. The ever growing U.S. budget and trade deficits will continue to be factors that would keep investors nervous about increasing their investments in the U.S..

Even if the U.S. economy rebounds and U.S. interest rates pick up, it does not follow that the U.S. dollar will recover automatically. A rise in short-term interest rates in the U.S. will trigger a fall in the U.S. bond market, which is currently a major source of foreign capital inflow preventing the U.S. dollar from a more dramatic fall (For example, in 2002 $1.2 trillion U.S. treasuries were controlled by foreign investors).

On Canada's side, reduced interest rates since the second half of 2003 have not had the expected effect on the loonie partly because their effect has been neutralized by continued similar measures by the Federal Reserve in the U.S.. The Bank of Canada will likely reduce its target rate, or at least maintain it at around its current level in the coming months. Lower

interest rates are also required in Canada to stimulate the domestic economy and make up for lower demand and lower revenue on the export side. A lack of fast or decisive economic recovery, mainly in the U.S., and a low domestic inflation rate will continue to provide a strong rationale for lower interest rate policy in Canada.

While a lower interest rate in Canada has its favorable effect on the agri-food industry as discussed above, it will likely not curb the rise in the value of the loonie as long as interest rates in the U.S. remain much lower. Currently, the Bank of Canada's target overnight rate – the main instrument for the Bank's monetary policy -- is set at 2.50%, compared to the Federal Reserve key rate of 1%. The Fed has recently signaled that it would not raise its key rate very soon.

Overall, indications are that the value of the U.S. dollar is not likely to rebound in the short run, not at least significantly, and the loonie will continue to rise to new heights or maintain its gains. Even in the event that the loonie slides back, it will still remain significantly stronger than its pre-2003 level.

Policy Implications

Even after accounting for the positive effects mentioned above, the net impact of the appreciation of the loonie's is likely to be significant with important policy implications.

- The long run effects mentioned above are consistent with the department growth strategy for Alberta's agri-food industry. Public policy can play a crucial role in aiding some of the necessary processes, such as the expansion of the value added sector through assisting innovation and product development. On the other hand, government policies (e.g., income safety-net programs and marketing regimes) that hinder market signals, such as the impact of exchange rate changes, from transmitting to producers will delay the needed economic adjustment.

- Another area of policy interest is market diversification, which requires among other things active market research and promotion. In the past, the free trade agreement with the U.S. and a cheap loonie had provided the economic rationale to concentrate on the backyard market. However, increasing trade disputes, less amicable political relationships, and the recent exchange rate shock provide the imperative to put efforts and resources to diversify export outlets. Alberta's agri-food exports to the rest of the world constitute only 45% of the provinces total agri-food exports. The national proportion is even lower at 38%. Although these figures may still appear substantial, in comparison to other exporting countries, Canada's presence in the world agri-food market is minimal except for certain cereals, such as wheat and pulses. In particular for meat and dairy products, Canada's presence is miniscule.[7]

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[7] For example, although Japan is Canada's second largest export market for beef and beef offal, Canada's market share is a shrinking and miniscule 4% compared to a rising U.S. market share of over 20%. The same trend is true of Canada's market share for pork in Japan, which averages around 5%. While the appreciation of t[illegible]n combined with price competitiveness boosted U.S. meat exports to Japan over the past decade, it did not do so for Canada, whose currency had actually depreciated both against the Japanese Yen and the U.S.

- Canada's/Alberta's relatively poor performance in the rest of the world, while mainly a result of increasing focus and reliance on the U.S. market, is also a function of a number of other factors including price competitiveness. A continued appreciation of the Canadian dollar could further weaken the price competitiveness of Canadian agri-food exporters both in the US and offshore markets in the absence of productivity and efficiency improvements. Market diversification and promotion into fast growing economies of the world has the potential of offsetting the detrimental effect of the rising loonie through rising demand in these markets.

- Higher reliance on primary exports to offshore markets should also change for reasons mentioned above but also because Canada/Alberta should in time establish competitive and comparative advantage in the processed product market. Low cost exporters from the developing world will increasingly control the market for primary products. Even with the fast growth in exports of value-added processed products in the past decade, only 27% of Alberta's value-added processed exports are currently shipped to offshore destination. That is, most of the export growth in these products took place in the U.S. market.[8]

- Alberta is keen on attracting investment from both domestic and international business. However, an appreciating loonie could discourage investment in the export-oriented industries due to its negative effects on export revenues. Investment strategies devised to attract investment into Alberta would thus need to take this effect into consideration in order to be effective.

- Finally, the rise in the value of the loonie will have policy implication for farm income support programs. Under the old NISA, it would probably require much higher flights in the loonie to solely cause a big enough shortfall in farm income to trigger payments. However, under the Canadian Agricultural Income Stabilization (CAIS) program or New NISA, farmers can be covered for any level of loss in their production margin. Even with the mitigating positive impact on the cost of imported inputs, the effect of the surge in the loonie on production margins could be significant, in particular for certain products with high proportion of export receipts and less reliance on imported inputs. The sharp appreciation of the loonie and the financial risk it posed signifies that agri-food producers need to utilize increasingly more futures and other private insurance markets to protect themselves from exchange rate and other market risks.

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dollar. Neither has Canada cashed on opportunities in the meat import markets of other fast growing Asian economies, whose meat consumption has increased as consumers shift from cereals to meat products.

[8] During the 1998-2002 period, on average, over 90% of Canola seed, close to 90% of wheat, 58% barley, over 85% of pulses, and 96% of hay and fodder from Alberta are shipped to offshore markets. By contrast, only 47% of processed meat, 37% of prepared animal feeds, 29% of refined canola/mustard seed oil, 19% of beef, 16% of fruit and vegetable juices, 13% of foods and food materials, and less than 2% of cereal preparations are exported to countries other than the U.S. The exceptions among processed products are malt and pork with 79% and 56% of exports destined to offshore markets, respectively. This trade pattern is also typical of the nation as a whole, except for pork.

Conclusion

A thorough examination of the effect of the changes in the exchange rate of the Canadian dollar on the Canadian agri-food sector would require a complex quantitative analysis, which would incorporate all of the effects mentioned above and more. Such analysis is beyond the scope of this paper. However, the paper attempts to identify the negative and some of the positive effects of an appreciating loonie in order to assess the net impact on the agri-food sector.

Given the high reliance of Canada's/Alberta's agri-food industry on the export market, the upward surge of the loonie is likely to have a significant negative impact on the industry. Depending on usage of imported inputs, which become cheaper with the appreciation of the loonie, the net effect will vary from product to product.

In the long run, agri-food producers will be forced to improve productivity and efficiency in order to become competitive in the international market. This will take place provided that government policies (e.g., income safety-nets and marketing regimes) do not hinder the transmission of market signals to producers. The appreciation of the loonie could discourage investment flow into the export-oriented sectors. Strategies aimed at attracting investment into the province will have to take this fact into consideration in designing incentive mechanisms.

In line with the Department's growth strategy, another area of public policy interest is the expansion of the value-added processing sector as this sector has more scope and flexibility to absorb market shocks, such as arising from exchange rate changes. Market diversification, in particular, for the value-added processed products is also evermore imperative.

Finally, the appreciation of the loonie has direct implications for government income support programs. The impact could be immediate under the new Canadian Agricultural Income Stabilization (CAIS) program under which farmers can be covered for any level of loss in their production margin.